

Remarks

Claims 1-3 and 5-21 were pending in the application. Claims 1-3 and 5-21 were rejected. No claims were merely objected to and no claims were allowed. By the foregoing amendment, no claims are canceled, claims 8 and 16 are amended, and claims 22-28 are added. No new matter is presented.

Interview Summary

Applicants thank the examiner for the courtesy of a telephone interview February 21, 2006 between the undersigned and the examiner. The undersigned discussed the interpretations below of Ford and the Blazek references. The undersigned submitted that the present independent claims were adequately distinguished.

The examiner proposed identifying a separate step of securing the blades to a disk to distinguish Blazek. The undersigned submitted this was unnecessary for the independent claims which were directed merely to the casting process and not to subsequent assembly.

The examiner indicated that he did not give creditability to the prior Rule 1.132 Declaration because it was by the inventor. The undersigned indicated the possibility of a Supplemental Declaration to be filed by a non-inventor employee of the assignee and to be submitted shortly after the filing of the present amendment so that such Declaration could be considered.

The undersigned indicated an intention to propose additional dependent claims further distinguishing the Blazek references and Ford but not believed necessary for inclusion into an independent claim.

No agreement was reached.

Claim Rejections-35 U.S.C. 112

Claims 1-3 and 5-7 were rejected under 35 U.S.C. 112(2). Applicants respectfully traverse the rejection.

The foregoing amendment to the specification addresses this. Nevertheless, as previously argued, one of ordinary skill in the art would inherently have understood this as is further referenced in the previously-submitted Rule 1.132 Declaration.

Claims 1-3 and 5-12 were rejected under 35 U.S.C. 112(2). Applicants respectfully traverse the rejection.

Two separate issues were raised. The second is well taken and has been corrected by the foregoing amendment. The first, however, is considered irrelevant. The claim identifies "a separate disk". As previously noted, disks are often formed by forging as would be understood by one of ordinary skill in the art. Thus, the question of whether Applicants refer "to forming the disk in a separate process step or to forming a disk in a separate mold cavity" is a non-sequitur.

Claims Rejections-35 U.S.C. 103

Claims 1-3 and 5-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over either Blazek (US4702298) or Blazek et al. (US4170256 or US4066116) and further in view of Ford (US2002/0005265). Applicants respectfully traverse the rejection.

The Blazek/Blazek et al. references (collectively the Blazek references) were previously discussed. Ford is newly cited. Ford discloses nothing more relevant than the prior art distinguished in paragraph 0025 of the present as-filed application. Ford's process is articulated at paragraph 0017 of Ford as involving pre-assembling a number of blade patterns and pouring basin pattern and then shelling the pattern assembly. Had there been any suggestion for one of ordinary skill in the art to adopt teachings of the Blazek references to blade manufacture, presumably Ford would have done so. That Ford didn't, is persuasive evidence of the impropriety of the combination.

As noted in prior responses and hereby reiterated, the Blazek references do not teach the manufacture of individual blades. The initially asserted modification and motivation was to apply the single pour basin of Ford to Blazek et al. "to reduce the number of pouring cups needed." Office action, page 3. Even if made, this modification does not cure the basic failing of the Blazek references to teach the manufacture of individual blades. Furthermore, there is no suggestion as to why one of ordinary skill in the art would use a single pouring cup for the relatively large castings of Blazek.

It was further asserted as conventional "to provide a filter in an investment mold for filtering inclusions, to obtain an optimal filling level through a routine experimentation, to

provide a working platform for assembling the patterns, to disassemble the mold assembly as soon as the solidification is complete." Office action, paragraph spanning pages 3 and 4.

Nevertheless, this does not suggest the particular locations of the claimed filters. Nor does it suggest the particular levels relative to those claim filters (e.g., as distinguished from a normal numerical optimization). Furthermore, there is no teaching for mold disassembly. Rather, the mold would be broken up removing the single cast part. Only the present application teaches disassembly (e.g., the individual removal of claims 25 and 26). A number of added claims further emphasize aspects of the differences relative to the underlying Blazek references.

New claim 22 identifies the blades as separate castings. Support for this is seen in the identification of plural castings in paragraph 0022 and the association of castings with the individual mold (or claimed mold section) of paragraphs 0023-0025.

New claim 23 identifies the mold section internal surfaces as forming a cavity having a portion for forming the identified blade root. Support for this is found in paragraph 0016 (identifying blade pattern root shape) and paragraph 0024 identifying the root portion of the mold cavity. Clearly, this distinguishes what would be an unjustifiably tortured interpretation wherein the blade root is merely an integral subportion of a disk casting.

New claim 24 identifies cutting away casting portions formed above the blade roots for which support is further found in paragraph 0024.

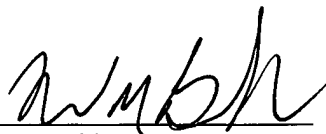
New claim 25 identifies the individual mold section removal for which support is found in paragraph 0023. Its dependent claim 26 is supported by paragraph 0024.

New claim 27 also identifies the plurality of castings for which support is found in paragraph 0023. New claim 28 is also supported by paragraph 0023.

Applicants disagree with the failure to properly weigh the Rule 1.132 Declaration. However, in view of the new ground of rejection, Applicants may further supplement the Declaration with one from a non-inventor.

Accordingly, Applicants submit that claims 1-3 and 5-28 are in condition for allowance. Please charge any fees or deficiency or credit any overpayment to our Deposit Account of record.

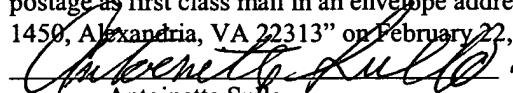
Respectfully submitted,

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